

ABSTRACT

A system and method uses a heuristic approach to manage the boosting of thread priorities after I/O completion to improve system performance. Upon detection of the completion of an I/O operation in response to a request, the system thread does not automatically boost the priority of the thread that made the I/O request by a fixed amount. Instead, the system thread determines whether to boost the requesting thread's priority by applying heuristic criteria based on the I/O operation status, such as whether the system thread has additional I/O requests to process, how many I/O request packets have been completed in the current thread context without a priority boost to the requesting thread, and the time that has passed since the last boosted I/O completion.